REMARKS

The Final Office Action mailed July 8, 2005, has been received and reviewed. Claims 1 through 7, 9 through 13, and 18 through 22 are currently pending in the application. Claims 1 through 7, 9 through 13, and 18 through 22 stand rejected. Applicants propose to amend claims 1 and 3, and respectfully request reconsideration of the application as proposed to be amended herein.

35 U.S.C. § 102(b) Anticipation Rejections

Anticipation Rejection Based on U.S. Patent No. 6,043,563 to Eldridge et al.

Claim 1 stands rejected under 35 U.S.C. § 102(b) as being anticipated by Eldridge et al. (U.S. Patent No. 6,043,563). Applicants respectfully traverse this rejection, as hereinafter set forth.

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Brothers v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the claim. *Richardson v. Suzuki Motor Co.*, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Eldridge describes spring contact areas fabricated at areas on an electronic component. In the technique illustrated in FIGS. 1A, 1B, and 1C, a conductive layer 120 is disposed on the surface of the component 108. A blanket layer 126 of metallic material is deposited and electrically contacts the layer 120. A wire 102 is bonded to the top surface of the conductive layer 126 and configured to have a spring shape. Next, the wire stem and adjacent area of the component 108 is overcoated with one or more layers of a metallic material, resulting in a spring contact element which is a freestanding elongate composite interconnection structure. Col. 7, lines 6-40. FIG. 5A illustrates a technique for effecting space-translation with spring contact elements which are composite interconnection elements. Metal lines 506 are formed on the surface of the component 502. This metal line defines an "extended tail" for the resulting spring contact element 510 which is a *composite* interconnection element. At the remote position to which the extended tail 506 extends, the composite interconnection elements which are

composite interconnection elements 510 are fabricated. Col. 12, lines 3-29.

Claim 1, as proposed to be amended herein, recites forming at least one electrically isolated spring-biased electrical contact and an associated elongate conductive trace extending therefrom from the layer of resilient conductive material and deforming at least a portion of the at least one electrically isolated spring-biased electrical contact to extend away from the at least one of the first and second surfaces of the substrate.

Eldridge fails to describe *forming both* an electrically isolated spring-biased electrical contact *and* an associated elongate conductive trace extending therefrom *from a layer of resilient conductive material.* In addition, Eldridge fails to describe deforming at least a portion of the at least one electrically isolated spring-biased electrical contact formed from the layer of resilient conductive material to extend away from the at least one of the first and second surfaces of the substrate. Rather, Eldridge describes a conductive layer or metal line and a wire bonded thereon. The wire is bonded to the conductive layer or metal line, and is not formed from the conductive layer or from the metal line. The wire may be overcoated with one or more layers of a metallic material in the technique illustrated in FIGS. 1A, 1B, and 1C, however the overcoated metallic material does not comprise an elongate conductive trace extending from the freestanding composite interconnection structure.

Accordingly, Eldridge fails to describe each and every element of claim 1. Therefore, it is respectfully submitted that the rejection to claim 1 should be withdrawn.

35 U.S.C. § 103(a) Obviousness Rejections

Obviousness Rejection Based on U.S. Patent No. 5,632,631 to Fjelstad et al. in view of U.S. Patent No. 6,043,563 to Eldridge et al.

Claims 1 through 3, 6, 7, 9 through 13, and 18 through 22 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Fjelstad et al. (U.S. Patent No. 5,632,631) in view of Eldridge et al. (U.S. Patent No. 6,043,563). Applicants respectfully traverse this rejection, as hereinafter set forth.

M.P.E.P. 706.02(j) sets forth the standard for a Section 103(a) rejection:

> To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references

> themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or combine reference teachings. Second, there must be a reasonable expectation of success. Finally, **the prior art reference (or references when combined) must teach or suggest all the claim limitations.** The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). (Emphasis added).

Fjelstad teaches flexible, tab-like cantilever contacts. Each contact 302 includes an anchor region 306 closely overlying connector body top surface 304 and secured to the connector body 300. A terminal 308 formed integrally with the contact is provided at the proximal end of each anchor region 306. A flexible tab 310 extends from the opposite distal end of each anchor region 306. Each tab is generally in the form of a strip extending upwardly, away from the connector body top surface 304. Col 14, lines 17-49.

The teachings of Eldridge have been summarized hereinabove.

The 35 U.S.C. § 103(a) obviousness rejections of claims 1 through 3, 6, 7, 9 through 13, and 18 through 22 are improper because the combination of Fjelstad and Eldridge fail to teach or suggest each and every element of the claims. In addition, there is no suggestion or motivation to make the suggested combination.

Fjelstad and Eldridge fail to teach or suggest deforming at least a portion of at least one electrically isolated spring-biased electrical contact to extend away from at least one of the first and second surfaces of the substrate. The contacts 302 of FIG. 13 of Fjelstad include a flexible tab 310 which extends from the opposite distal end of each anchor region 306. The tab is joined to the anchor region along a hinge line 311. Each tab is generally in the form of a strip extending upwardly, away from the connector body top surface 304. Fjelstad does not teach or suggest deforming at least a portion of the contacts 302. The wires 102 of Eldridge are bonded to the surface of the semiconductor device 108, and are thus free-standing, extending away from the semiconductor device. The wires 102 are not *deformed* to extend away from the semiconductor device, as they are bonded in place, extending away from the semiconductor device.

There is no suggestion or motivation to treat the contacts of Fjelstad in the manner suggested for the spring contact elements of Eldridge. The spring contact elements of Eldridge

are wires bonded to the surface of a semiconductor device, which may be overcoated (e.g. plated) with one or more layers of a metallic material (e.g. nickel). The contacts of Fjelstad are dissimilar, flexible, tab-like cantilever contacts. The heat treatment suggested for the spring contact elements of Eldridge could affect the desired flexibility of the tab-like cantilever contacts of Fjelstad.

Accordingly, the Fjelstad and Eldridge references cannot and does not establish a *prima facie* case of obviousness under 35 U.S.C. § 103 regarding the presently claimed invention of independent claim 1.

The nonobviousness of independent claim 1 precludes a rejection of claims 2 through 3, 6, 7, 9 through 13, and 18 through 22 which depend therefrom because a dependent claim is obvious only if the independent claim from which it depends is obvious. *See* In re Fine, 5 U.S.P.Q.2d 1596, 1600 (Fed. Cir. 1988), *see also* MPEP § 2143.03. Therefore, the Applicants request that the Examiner withdraw the 35 U.S.C. § 103(a) obviousness rejection to independent claim 1 and claims 2 through 3, 6, 7, 9 through 13, and 18 through 22 which depend therefrom.

Claims 2 and 3 are additionally allowable as Fjelstad does not teach providing a laminate sheet of the resilient conductive material; bonding the laminate sheet to the at least one of the first and second surfaces of the substrate; and forming at least one electrically isolated spring-biased electrical contact and an associated elongate conductive trace extending therefrom from the layer of resilient conductive material.

Obviousness Rejection Based on U.S. Patent No. 5,632,631 to Fjelstad et al. in view of U.S. Patent No. 6,043,563 to Eldridge et al. and further in view of U.S. Patent No. 4,950,173 to Minemura et al.

Claims 4 and 5 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Fjelstad et al. (U.S. Patent No. 5,632,631) in view of Eldridge et al.(U.S. Patent No. 6,043,563) and further in view of Minemura et al. (U.S. Patent No. 4,950,173). Applicants respectfully traverse this rejection, as hereinafter set forth.

Claims 4 and 5 are each allowable, among other reasons, as depending from claim 1 which should be allowed.

ENTRY OF AMENDMENTS

The proposed amendments to claims 1 and 13 above should be entered by the Examiner because the amendments are supported by the as-filed specification and drawings and do not add any new matter to the application. Applicant respectfully submits that the amendments more clearly define a conductive trace, and do not raise new issues or require a further search. Finally, if the Examiner determines that the amendments do not place the application in condition for allowance, entry is respectfully requested upon filing of a Notice of Appeal herein.

CONCLUSION

Claims 1 through 7, 9 through 13, and 18 through 22 are believed to be in condition for allowance, and an early notice thereof is respectfully solicited. Should the Examiner determine that additional issues remain which might be resolved by a telephone conference, he is respectfully invited to contact Applicants' undersigned attorney.

Respectfully submitted,

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